

## ABSTRACT

An optical fiber is colored to provide a striped pattern while maintaining a substantially uniform diameter of the fiber. In one embodiment, a coating of a first curable material having a base color is applied to an optical fiber core section using a coloring die. One or more stripes of a second curable material are applied using the die to the coating before the coating is fully cured. The stripe has a stripe color different from the base color and is formed in the coating such that the diameter of the fiber remains substantially uniform. In another embodiment, a tandem coloring system is used in which the coating is partially cured and one or more striping nozzles apply stripe(s) to the partially cured coating. In a further embodiment, the base color coating is applied and cured leaving one or more gaps. One or more stripes are applied in the gap(s) and cured to fully cover the fiber with a substantially uniform diameter.